



Indiana State Department of Health

Epidemiology Resource Center

Quick Facts

About...Fifth Disease (Human parvovirus B19)

What is fifth disease?

Fifth disease is caused by the human parvovirus B19 and is a common, highly contagious childhood mild illness. Symptoms include a “slapped” cheek rash, fever, fatigue and muscle aches. Few complications are experienced in healthy children, although the disease may cause painful arthritis symptoms in some children and adults.

How is fifth disease spread?

Fifth disease is spread, like a cold, through direct contact with an infected person’s nose and mouth secretions or when an infected person sneezes or coughs. A person is most likely to spread the virus during the week prior to the appearance of the rash. Children or adults may return to school or work after the rash first appears.

Who is at risk for fifth disease?

School-aged children and women who are exposed to children at work or in the home are at greatest risk for infection. People with weakened immune systems are at risk for serious complications from fifth disease. Pregnant women that have been in contact with a case of fifth disease during their infectious period have a relatively low potential risk for infection. Fifth disease is most common in elementary aged students during the winter and spring months, although cases may occur year-round. A person can only be infected with the virus one time during his or her life.

How do I know if I have fifth disease?

Symptoms of headache, fever, fatigue and muscle aches often appear prior to the appearance of the “slapped cheek” rash. The rash appears bright red and is most visible on the face and spreads to the trunk, arms, and legs. As the rash fades, it appears in a lace-like pattern and returns upon exposure to sunlight, heat, exercise

or stress. In adults, the most common symptom is arthritis 2-3 weeks after the initial onset of symptoms.

Human parvovirus can cause other illnesses including upper respiratory infection. People with sickle cell anemia are at greater risk for a sickle-cell crisis, where red blood cells may fail to develop normally.

How can fifth disease be treated?

For most children, fifth disease infection is mild. Over the counter medication and cool compresses may be used to reduce joint pain, fever, or other aches.

How is fifth disease prevented?

- Good personal hygiene is the best way to prevent the spread of human parvovirus, including frequent hand washing and prompt disposal of used facial tissues.
- Persons with sickle cell anemia, impaired immune system, or women who are pregnant should avoid cases of fifth disease. They should talk with their health care provider if they have been in contact with a case of fifth disease.

All information presented is intended for public use. For more information, please refer to the Centers for Disease Control and Prevention website on parvovirus:

<http://www.cdc.gov/parvovirusB19/fifth-disease.html>

Red Book®. (2009, 28th ed). 2009 Report of the Committee on Infectious Diseases. American Academy of Pediatrics.

Mayo Clinic website on parvovirus:

<http://www.mayoclinic.com/health/parvovirus-infection/DS00437>

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